UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,677	02/25/2004	Stewart S. Taylor	884.B91US1	3000

21186 7590 07/13/2005

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402-0938

EXAMINER	
MAI, LAM T	

ART UNIT	PAPER NUMBER
2819	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H·A

Office Action Summary	Application No.	Applicant(s)	
	10/786,677	TAYLOR ET AL.	
	Examiner	Art Unit	
	LAM T. MAI	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *26-28* is/are allowed.

6)☒ Claim(s) *1,2,7-11,16-22,24 and 25* is/are rejected.

7)☒ Claim(s) *3-6,12-15 and 23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/3/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7-11, 16-22, and 24-25, are rejected under 35 U.S.C. 102(b) as being anticipated by Ekman et al (USP 6,288,606).

Regarding claim 1, Ekman et al discloses an amplifier circuit producing an output (104) signal and receive an input (101) signal including an adjustable phase (404) to reduce a phase distortion (col. 2, lines 23-25) (see figure 4; col. 6-8).

Regarding claim 2, Ekman teaches a detector (406) to detect amplitude) (see figure 4; col. 6-8).

Regarding claim 7, Ekman teaches CMOS in the amplifier) (see figure 4; col. 6-8).

Regarding claim 16, Ekman et al discloses a technique reduce change in a phase of the output (104) signal including an adjustable phase (404) to reduce a phase distortion (col. 2, lines 23-25) (see figure 4; col. 6-8).

Regarding claim 17, Ekman teaches a detector (406) to detect amplitude (see figure 4; col. 6-8).

Regarding claim 18, Ekman teaches a detector (406) to detect peak values of amplitude of output signal (see figure 4; col. 6-8).

Regarding claim 19, Ekman teaches a detector (406) to detect amplitude of the output signal power value (see figure 4; col. 6-8).

Regarding claim 20, Ekman teaches a technique reduce change in the phase of the output signal by the adjusting the phase of the input (see figure 4; col. 6-8).

Regarding claim 21, Ekman teaches a technique reduce change in the amplitude of the output signal by the adjusting the phase of the input (see figure 4; col. 6-8).

Regarding claim 22, Ekman et al discloses an amplifier circuit performing detecting (406) an indication of an amplitude of an output signal and adjusting phase (404) of an input signal of the amplifier responsive to the indication to reduce a change in a phase of the output signal (col. 2, lines 23-25) (see figure 4; col. 6-8).

Regarding claim 24, Ekman teaches an amplifier circuit adjusting a bias value of an amplification stage in the amplifier to reduce amplitude distortion included in the output signal (col. 2, lines 23-25) (see figure 4; col. 6-8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekman as applied to claim1 above, and further in view of Huang (USP 6175302).

Regarding claim 8, Huang discloses a circuit having multi stage amplifiers (figure 7, col. 4 and 5) including first stage and second stage. Huang fails to teach each stage amplifier producing an output signal and receive an input signal including an adjustable phase to reduce a phase distortion of the amplifier.

While Ekman disclose an amplifier circuit producing an output (104) signal and receive an input (101) signal including an adjustable phase (404) to reduce a phase distortion (col. 2, lines 23-25) (see figure 4; col. 6-8)

It would have been obvious to one of ordinary skill in the art at the time of the invention to integrate Ekman's amplifier into Hashimoto circuit to improve output of the circuit.

Regarding claim 9, Huang teaches the second stage is to provide the output signal.

Regarding clam 10, Huang teaches third stage coupled to the second stage and provide output signal.

Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Ekman as applied to claim1 above, and further in view of Ostermiller (USP 5,003,316).

Regarding claim 11, Ostermiller discloses a system includes an omnidirectional antenna (12) coupled to an amplifier (14). Ostermiller fails to teach that the amplifier producing an output signal and receive an input signal including an adjustable phase to reduce a phase distortion of the amplifier

While Ekman disclose an amplifier circuit producing an output (104) signal and receive an input (101) signal including an adjustable phase (404) to reduce a phase distortion (col. 2, lines 23-25) (see figure 4; col. 6-8)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine omnidirectional antenna teaches in Ostermiller circuit to the amplifier teaches by Ekman to make up a system.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ekman as applied to claim1 above, and further in view of Huang (USP 6175302).

Regarding claim 25, Huang discloses a circuit having multi stage amplifiers (figure 7, col. 4 and 5) including first stage and second stage. Huang fails to teach each stage amplifier producing an output signal and receive an input signal including an adjustable phase to reduce a phase distortion of the amplifier.

While Ekman disclose an amplifier circuit producing an output (104) signal and receive an input (101) signal including an adjustable phase (404) to reduce a phase distortion (col. 2, lines 23-25) (see figure 4; col. 6-8)

It would have been obvious to one of ordinary skill in the art at the time of the invention to integrate Ekman's amplifier into Hashimoto circuit to improve output of the circuit.

Allowable Subject Matter

Claims 26-28 are allowable. The reason is the prior art fails to teach or suggest a translinear circuit to be coupled to the second input signal and to the indication, and to adjust the adjustable phase.

Claims 3-6 are objected to as being dependent upon a rejected base claim, but they would be considered for allowable if they are rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to teach or suggest features claim in the objected claims.

Claims 12-15 are objected to as being dependent upon a rejected base claim, but they would be considered for allowable if they are rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to teach or suggest features claim in the objected claims.

Claims 23 is objected to as being dependent upon a rejected base claim, but it would be considered for allowable if it is rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to teach or suggest features claim in the objected claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM T. MAI whose telephone number is (571)272-1807. The examiner can normally be reached on 6:00 am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pascal J. Robert can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lam Mai

Lam T. Mai
Art Unit 2819